W6IFE San Bernardino Microwave Society Newsletter

President Chip Angle N6CA 25309 Andreo Lomita, CA 90717 310-539-5395 chip@anglelinear.com

VP Joe Saddler WA6PAZ 13909 Fidler Bellflower, CA 90706 310-867-3294

Recording Sec Eric Fort KD6GLP PO Box 42 Etiwanda, CA 91739 909-899-3092

Corresponding Sec Phil Biles K6COY 446 Colorado St. Anaheim, CA 92801 714-527-3632 philbiles@worldnet.net

Treasurer Dick Kolbly K6HIJ 26335 Community Barstow, CA 92311 760-253-2477 70541.2312@compuserve.com

Editor Bill Burns WA6QYR 247 Rebel Rd Ridgecrest, CA 93555 760-375-8566 bburns@ridgecrest.ca.us

ARRL interface Frank Kelly WB6CWN 1111 Rancho Conejo Blvd. #501 Newbury Park, CA 91320 805-499-8047 fk@event1.com

FCC interface Dave Laag K6OW 11614 Indian St. Moreno Valley, CA 92557 909-924-1517

W6IFE license trustee Ed Munn W6OYJ 6255 Radcliffe Dr. San Diego, CA 92122 619-453-4563 75353.1255@compuserve.com

The 5 $\underbrace{March~1998}$ meeting tech talk will be Doug, K6JEY on rubidium standard oscillators. SBMS meets at the American Legion Hall 1024 Main Street (south of the 91 freeway) in Corona, CA at 1930 hours local time on the first Thursday each month.

Last meeting- Chip, N6CA presented information on how to build loop yagis. Lots of details on how to go about assembly of an antenna so it would stay up in the environment for several years without degrading. (Note loop yagis are the ones not bent in ice storm picture March QST p 67 of Directive Systems owner K1WHS, thanks Chip for pointing that out. Ed) Careful measurement before cutting, drilling in-line holes, cleaning and painting were key. Chip had the loop yagi antenna kits for both 1.2 and 2.4 Ghz. The loop parts were from Directive Systems. Enclosed are the data sheets for loop yagis. Ed, W6OYJ had brought in some more San Diego Microwave Group excess hardware. Ken, WB6DTA brought in some waveguide and other hardware for the group. The San Diego Microwave Group had proposed that an antenna measurement party be arranged some where between the two areas sometime early summer. The separation between the antennas on the San Diego microwave "repeater" is now 40 feet with additional amplifier gain over the previous 10 ft separation. Chuck, WA6EXV has a plaque ready for the 1997 10 Ghz contest winner. It was agreed that SBMS would make two awards for the ARRL 10 Ghz contest since there now are two categories, "10 GHz" and "10 GHz and Up". The Annual Dinner was still set for 28 Feb. It was proposed that SBMS make a collection of microwave antenna articles for a future publication. Chuck will be the collection person. It was noted the fine article by Paul Wade, N1BWT in Jan/Feb QEX magazine. At the March meeting will be a discussion of liaison frequencies to be used

on the "George" contest and who plans to be on. Meeting visitors were Tim Adams, N6DLC of West Covnia and David Turin, KF6OQK of San Dimas. Welcome. 23 people present.

Scheduling

- 7 Mar The George QTH-QTH QSO event
- 2 Apr. Chuck, WA6EXV antenna measurements
- 7 May Eric, KD6GLP and Jeff, KN6VR video transmission link hardware talk
- 4 June George, K6MBL Magnetron operation

Activity- Chuck, WA6EXV has been making antenna measurements of N6CA's dishes and has been building sources for the antenna range. Jim, K6ML received a Qualcom kit for 10 Ghz. Ed, W6OYJ has been working on 1296 Mhz rig. Dick, WB6DNX had a start on the new 2 Ghz rig and had receiver sections available. Dave, WB6OVZ worked on his 24 Ghz dish. Kurt, KA6RRA worked on 1.2 Ghz rig and built a mount for his 57 inch dish. Jeff, KN6VR and Eric, KD6GLP worked on a Part 15 Wavecom Jr. 2 Ghz video link and are planning to add a MMIC power amplifier. Joe, WA6PAZ purchased a SHF 24 Ghz antenna and horns. Larry, K6HLH has a DownEast 1.2 and 5.6 Ghz rigs working. Tim, N6DLC has a 1.2 Ghz beam up on tower. Dave, KF6OQK has had his license for 2 months and is a 7th and 8th Grade teacher. Ed, K6ODV has 5 and 10 Ghz rigs done. Chip, N6CA assembled loop yagi kits. Ken, WB6DTA reworking his 10 Ghz rig and building a 902 Mhz rig. Bob, W6SYA had some 1296 Mhz contacts.

Stuff in the Magazines- Feb. CQ VHF has a microwaves: Ham Radio's Final Frontier column by W2VU, A Beginner's Guide to Amateur Microwaving by GM4PLM; and a basic department. WB6NOA gives a review of the Garmin GPS-III with grid squares. Nice magazine. Feb. QST has an article by WB8IMY on using a Drake MMDS down converter to listen on 2.4 Ghz. WB6IGP's "Above & Beyond" column in 73 Amateur Radio Today for Feb. talks about ovens and oscillators for reference use. Jan/Feb QEX has a good article on "Parabolic Dish Feeds- Performance Analysis" by N1BWT and a home-brew 2.4 Ghz receiver for Phase-3D by W6IOJ. Please note the changes in the Table 6 to the Jan QST "FCC RF- Exposure Regulations- The Station Evaluation" in Feb. QST page 72. March QST has a notice (p 79) that QST is looking for "technical articles". In previous times all that had been dumped to QEX. Now QEX has upped the subscription rate and lowered number of issues. March CQ VHF has a microwave special on European microwave, an article by G3WDG on the "standard" 10 Ghz transverter, initial issue of WA5VJB column Final Frontier: Ham Radio above 1000 Mhz and cover photo of WA7CJO station. March 73 Amateur Radio Today article by WB6IGP on microwave filters.

10 Ghz Results- March QST has a ONE page summary of the 1997 ARRL 10 Ghz and Up Cumulative Contest.

call	points	qsos	calls worked	best dx km
WA6CDR	44920	151	23	565
WD4MVO/0	44289	66	11	309
N0IVN	41082	293	12	249
N0UGV	34539	1100	11	248
W1VT	20028	121	31	413

N6XQ	19522	65	25	768
N1BWT	18353	105	38	406
W1AIM	17166	111	35	274
WB1FKF	16902	133	29	223
AF1T	16518			
K1LPS	14893			
K0RZ	14338			
K6GZA	13088	51		770
K4EFD	12148			
K1AE	12112			
KB1VC	11610			
K9PW/1	10806			

Most QSOs 0 land N0UGV

Best DX 6 land K6GZA & N6XQ

Most calls 1 land N1BWT

K6OW	21619	129 qsos	27 calls	643 I/134 J
WA6QYR	14816	86	23	473/134
WA6EXV	14040	102	23	390/129
W6OYJ	13035	86	28	476/137
N6CA	12119			420/134
WB6DNX	11253			429/134

Most QSOs 6 land K6OW

Most calls 6 land W6OYJ

Best DX I-band 1217 km 5 land W5LUA (EME?)

Best DX J-band 134 km 6 land K6OW & WA6QYR & WB6DNX & N6CA

note: many errors are in the QST listing......I tried to correct as many as I could find...de N6CA

Note- Al, W5LUA comments on possible contest changes. The increase in time span - two total weekends which would allow night time laser shots and EME where time zones could be different AND the previous SBMS discussion of early morning tropospheric propagation effects. (Oh boy, no sleep or battery recharge on mountain tops now!) I see ARRL now has allowed EME contacts (by default or not noticing? Maybe needs a new category?)

"Wants and Gots" for sale- 2 HP 431's \$20 each Dick, WB6DNX 714-529-2800

175 pound antenna rotator for large dish Ed, W6OYJ 619-453-4563 (will the NJ ham call again).

73's Bill